

# Energy EFFICIENCY

October 2003 Volume 7, Issue 4

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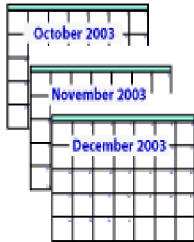
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## Mission Valley Power Recognizes Local Businesses



Mission Valley Power (Pablo, Montana) representatives present a check and plaque to Plum Creek Manufacturing, Inc. in recognition of their successful energy conservation efforts. L to R: Ken Benson, Plum Creek; Judy Decker, Mission Valley; Ken Judge, Plum Creek; Marla McCombie, BPA/Missoula; and Ralph Goode, Mission Valley.



Have  
SAW  
Will  
Travel

Click on the image to the left for details.

Ralph Goode, manager of Mission Valley Power, Pablo, Montana, presented two local businesses with a check and plaque in recognition of their

Plum Creek Manufacturing Inc. put measures in place this summer that are saving about 1,215,133 kilowatt hours of energy. They installed

energy efficiency efforts.

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## Alcoa and Chelan County PUD Fund Solar Panels

In cooperation with Chelan County (Washington) PUD, Alcoa Aluminum's Wenatchee, Washington Works will provide \$439,740 to purchase solar power equipment that will be installed at schools and nonprofit agencies in Chelan County. In addition to the funds, Alcoa will donate labor valued at \$666,810 to install up to 35 systems by the end of 2003.



The BPA Energy Efficiency Newsletter is published quarterly in January, April, July, and October. **Please submit news items to [Newsletter](#).** Or call (503) 230-5861.

an energy-efficient air dryer and hog fuel conversion system. Plum Creek received \$180,000 from Mission Valley Power.

Rod's Harvest Foods received partial payment of \$500 for installed energy-efficiency measures. The measures include a complete refrigeration system replacement, added roof insulation, energy efficient lights and ballasts. Recaptured heat from compressors heats water for various uses, and for heating the building. Rod's saved about 256,630 kilowatt hours.

These projects were implemented under BPA's Conservation Augmentation Program.

-- Marla McCombie  
(406) 829-3313



Energy Awareness Month

## ENERGY STAR Residential Strategy

In July 2003, the NW Energy Efficiency Alliance Board of Directors unanimously adopted a residential sector strategy and a residential new construction program based on ENERGY STAR homes for single-family site-built and manufactured housing. Both the strategy and the new construction program were worked through a public process around the region over a 14-month period. Builders, utilities, and state and federal agencies were involved.



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## High Energy Cost Grants Awarded to Two BPA Customers

In July 2003, The U.S. Department of Agriculture announced it was awarding nearly \$15 million to seven states to provide, develop, and improve energy services in rural areas with very high energy costs. The grants are provided through USDA's High Energy Cost Program and are to be used for the acquisition, construction, installation,

repair, and replacement or improvement of energy generation transmission or distribution facilities in communities with extremely high energy costs. For more information, visit an USDA Rural Development office, or logon to [www.rurdev.usda.gov](http://www.rurdev.usda.gov).

### ***BPA Customers Participating in the Grant Program:***

**Ferry County PUD**, Republic, Washington, was awarded \$888,408 in grant funds to reach some of their 175 to 200 customers who live in remote areas that are not served by the PUD's current infrastructure. The program will be made available to consumers whose present amortized cost of electricity exceeds \$.23 per kWh. Part of the grant funds will be loaned to residents to purchase photovoltaic solar generation through the Western Solar Utility Network.

**Raft River REA**, Malta, Idaho, received \$3,775,000 in grant funds. The funds will be used to build a transmission line to provide power to the western division of the Raft service area, including the Duck Valley Indian Reservation. The existing 69-kilovolt line that was built in 1915 lacks sufficient capacity and is expensive to maintain. Currently, not all of the reservation is served.





# News from Around the Region

## Lincoln Electric Demonstrates Solar System

Lincoln Electric Coop, Eureka, Montana, recently approved a new policy that allows consumers to interconnect their small renewable energy systems to the utility grid. They also approved a new net metering policy.

To encourage interconnections and net metering, Lincoln hosted a free solar seminar to educate their customers about clean, reliable solar technologies. Attendees saw a demonstration of Lincoln's 1-kW grid-tied photovoltaic system and learned about how net metering can work for them. "Events such as 9/11 and the Northeast blackout (August 2003) that darkened the homes of over 50 million Americans underscore the vulnerability of the nation's electrical grid. Folks want to know more about what role renewables can play in providing



Tim Engleson, Manager of Marketing & Member Services , Lincoln Electric Coop in front of Lincoln's grid-tied photovoltaic system.

power, independent of the grid," said Tim Engleson, Manager of Marketing & Member Services.



them

## Springfield Schools Enjoy Bright Lights and Saving Money

Springfield, Oregon, schools have received nearly \$650,000 in rebates from the [Springfield Utility Board](#) since SUB began its Resource Conservation Program in 1996. About 75 percent of the rebates were funded through BPA.

The school district saves more than 2 million kilowatt-hours of electricity each year and avoids about \$253,000 in energy costs. The district replaced more than 4,300 light fixtures and retrofitted another 10,500. In addition to saving energy, the new lights are brighter without being harsh and they generate less heat.

Only two out of more than 30 buildings remain to be retrofitted.

-- Jeff Nelson, Power Resource Manager, Springfield Utility Board (541) 744-3779

## Kids in the Creek Program Helps Scouts Earn Conservation Badge

Find yourself a flowing creek, get some kids involved and -- voila! -- you have a great beginning to BPA's Kids in the Creek Program. [Modern Electric Water Company](#), Spokane, Washington, has participated in Kids in the Creek since 1996. Each year Modern takes hundreds of students from Central Valley School District or the local Cub Scouts and teaches them about water and electrical energy conservation. The average age is 11-12 years, but as Terri Richey, Public Relations Coordinator at MEWCO, discovered this summer, the program can be adapted to



8-12 year olds as well. Cub Scout Troops #410 and #404 earned partial credit for a Scouting Conservation Badge by helping Terri conduct water experiments and learning about water quality in the creek at Liberty Lake Park.

**Kids in the Creek at Liberty Lake Park, Spokane.**  
(Photo by Rosalie Nourse, BPA)

The fun part is hearing the laughter and delight from the kids as they wade in the creek. With a small net in hand, they're looking for insects. The good news is that if the insects can thrive in and around the creek, so can fish.

MEWCO conducts the program to promote water quality, protection of streams and ultimately the Spokane aquifer. Conservation of energy and water is stressed throughout the program to send a strong message to youth.

Mike Baker, utility manager, feels the program is a great way to teach the benefits of clean water and how conservation will keep our resources for the future.

-- Rosalie Nourse, BPA (509) 358-7463  
-- Terri Richey, MEWCO. (509) 755-9003

## **Partnership Reaps Rewards**

Clark Public Utilities (CPU), Vancouver, Washington, and the Clark County Department of Community Services (DCS) were recognized recently by the U.S. Department of Energy for their work in weatherization outreach. The partners worked together to form a single-source data system to enhance quality service and response to emergency needs for customers.

The DCS included the utility in local training, which resulted in CPU gaining a greater understanding of the work that takes place and the ability to offer additional services to complement the weatherization work.

Clark Public Utilities provides \$400,000 in annual funding for weatherization services in Clark County.

-- Fred Tulp, Clark Public Utilities (360) 992-3345

## **Energy Festival Explores Non-traditional Energy Technology**





Shelby Osborn, above left, tries her hand at making pottery at the annual Northwest Renewable Energy Festival in September at Whitman College, Walla Walla, Washington. The festival showcased exhibits, discussions, and workshops on non-traditional energy sources as well as offering interactive exhibits for children. Above right : Todd Blackman, [Franklin County PUD](#), Pasco, Washington, explains a solar energy model to festival attendees. (Photos by Tom Osborn, BPA Spokane office)

-- Tom Osborn (509) 527-6211 or Phyllis Chamberlain (509) 527-6307

## BPA, WSU, and Nez Perce Indian Tribe Receive Million Solar Roof's First Zero Energy Buildings Award

The [Nez Perce Tribe](#), the Bonneville Power Administration, and Washington State University Cooperative Extension received Million Solar Roof's (MSR) first Zero Energy Buildings award at the second MSR annual meeting in Austin, Texas, this summer.

The project was conceived in September 2001 and, in 2002, evolved into a major zero-energy use home demonstration project with significant support and involvement from the manufactured housing industry (Kit Manufacturing and Clearwater Homes), innovative building technology suppliers, and



Clearwater Power Company). The project demonstrates, promotes and monitors innovative renewable energy and energy saving technologies in an all-electric super efficient manufactured home.

"The home is Tribal housing for operations staff at the Nez Perce Hatchery at Cherry Lane, Idaho," said Adam Hadley, mechanical



engineer at BPA.

The Nez Perce Tribe purchased two manufactured homes built to Super Good Cents, ENERGY STAR, and Earth Advantage standards. The Zero Energy Manufactured Home (ZEMH) was modified “beyond current practice” technologies with the intent that it would use very little electric power off the grid over the course of a year. The Base Home, which is sited next to the ZEMH, has the identical floorplan but does not have the additional energy-saving innovations. Solar technologies play an important role in the ZEMH, including solar domestic hot water, passive solar design, and a 4.2-kW photovoltaic system. A net metering agreement is currently in negotiation. Consumption data will be monitored and downloaded at 15-minute intervals by the Florida Solar Energy Center.

By demonstrating the innovative technologies in the ZEMH Project, participants bring added awareness of energy conservation to the general public, new homebuyers, and the manufactured home industry.

For detailed information about this project, including materials used in both homes, visit the BPA Energy Efficiency web site ([www.bpa.gov/energy/n](http://www.bpa.gov/energy/n)), or you can contact [Adam Hadley](#) directly at (503) 230-4631.

-- Excerpt from an article on the Million Solar Roofs website:  
[www.millionsolarroofs.org/about\\_initiative/](http://www.millionsolarroofs.org/about_initiative/)

*Photos by Adam Hadley, Bonneville Power Administration*

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The Northwest Energy Efficiency Alliance now offers a service to help reduce the time spent by conservation staff conducting product and technology assessments. The service is operated by the EnergyIdeas Clearinghouse and the Lighting Design Lab. For more information, check out [NEEA Product and Technology Sheets](#)



# Energy EFFICIENCY

## People

### Biemer Receives EPA Award

BPA Mechanical Engineer Jon Biemer's efforts in the Water & Waste Water Program earned him recognition in the 1st Annual EPA Region 10 Champions for Environmental Leadership and Green Government Innovation awards. The recognition program acknowledges individuals and groups of federal agencies outside of the Environmental Protection Agency who show leadership by going above and beyond the call of duty in working to improve the environment and to protect our natural resources.

Jon has a track record in environmental leadership and innovation.



Accomplishments noted with this award include:

- Suggesting BacGen Biowise Technologies expand the scope of their energy services for municipalities to include

### Energy Efficiency Loses Team Member



Rick Miller, a BPA Energy Efficiency staff member, died August 27 in Spokane, Washington. He was 55.

Rick came to work for BPA in 1990 and served in the Spokane office. He "masterminded" a \$3.5 million energy conservation project at Fairchild Air Force Base that is saving the Air Force, the government and taxpayers significant money, and frees energy for the region to use elsewhere. Rick also managed the VendingMi\$er program.

-- Rosalie Nourse (509) 358-7463

water supply systems as well as wastewater treatment systems, which doubled the energy savings that could be acquired under the program.

- Promoting this systems approach to the Consortium for Energy Efficiency, which now sponsors a national initiative to save energy in water and wastewater facilities.
- Heading BPA's Cross-agency Sustainability Team.
- Initiating inclusion of the Sustainable Energy track at the May 2003 Sustainability Forum in Portland, Oregon.

About a dozen federal employees from other agencies were also recognized.

*(Jon Biemer retired from BPA on September 30, 2003, and intends to continue his work in the field of energy and sustainability through involvement with non-profit and other organizations.)*





# New Technology

## Fuel Cell Grant

BPA is managing a U.S. DOE Washington State fuel cell education grant for the Northwest Energy Technology Collaborative (NWETC). The grant will be used to develop and present fuel cell curriculum and car kits to 200 Washington high school science teachers.

The teachers will teach students about fuel cells and encourage participation in a fuel cell poster contest. The grant will also web-cast the first fuel cell—powered band on Earth-Day and install an Avista Labs Independence 1000 fuel cell system at Central Washington University (CWU).

The goal of the project is to make students aware of fuel cells and their potential benefits. For more information check the following web-site:

[http://www.bpa.gov/Energy/N/projects/fuel\\_cell/education.shtml](http://www.bpa.gov/Energy/N/projects/fuel_cell/education.shtml)

--Mira Vowles (503) 230-4796

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## C&RD Calculator Refresher

To link to the Conservation & Renewables Discount calculator, BPA customers should follow these procedures:

1. Go to <http://www.rtf.nwppc.org/>
2. Login to their accounts.
3. Once logged in, scroll down to downloads on far left of screen. Select the 'Downloads' link
4. Scroll down to 'Downloadable Calculators' and select the 'Agricultural - Variable Speed Drive on Vacuum Pumps' link
5. The Excel spreadsheet will open and be ready for input!

The deemed kilowatt-year savings approach from the calculator has proven useful for Conservation Augmentation dairy vacuum pump variable frequency drive projects, too.

(Or, click [here](#) for the spreadsheet.)

-- *Todd Amundson (503) 230-5491.*

